

Quality Control Statistical Summary

Onshore Grab Sample: BV-31-BB

Sample Taken By: D. Phelps
 Sample Taken On: 03/18/09
 County: Brevard

Latitude: 28° 26' 24.7"
 Longitude: 80° 33' 18.4"
 Datum: WGS 84

| Statistical Results: Pre-CaCO3 | | | | |
|--------------------------------|-----------|-----------------------|----------|----------------------|
| | Duplicate | | Original | |
| Mean: | 1.3302 | phi (0.3977 mm) | 1.2600 | phi (0.4176 mm) |
| Standard Dev: | 0.5795 | phi-units (0.6692 mm) | 0.6039 | phi-units (0.658 mm) |
| Skewness: | -0.4664 | dimensionless | -0.4861 | dimensionless |
| Kurtosis: | 5.5025 | dimensionless | 5.2263 | dimensionless |
| 5th Moment: | -9.5590 | dimensionless | -8.3438 | dimensionless |
| 6th Moment: | 64.1811 | dimensionless | 57.2676 | dimensionless |
| RARD*: | 0.4356 | dimensionless | 0.4793 | dimensionless |
| Median: | 1.2238 | phi (0.4281 mm) | 1.1701 | phi (0.4444 mm) |

| Statistical Results: CaCO3 | | | | |
|----------------------------|-----------|-----------------------|----------|-----------------------|
| | Duplicate | | Original | |
| Mean: | 1.0461 | phi (0.4843 mm) | 0.9440 | phi (0.5198 mm) |
| Standard Dev: | 0.6987 | phi-units (0.6161 mm) | 0.7236 | phi-units (0.6056 mm) |
| Skewness: | -0.9305 | dimensionless | -0.7219 | dimensionless |
| Kurtosis: | 4.3699 | dimensionless | 3.9637 | dimensionless |
| 5th Moment: | -9.2875 | dimensionless | -6.8203 | dimensionless |
| 6th Moment: | 34.1109 | dimensionless | 28.4525 | dimensionless |
| RARD*: | 0.6679 | dimensionless | 0.7666 | dimensionless |
| Median: | 1.0233 | phi (0.492 mm) | 0.9065 | phi (0.5335 mm) |

| Statistical Results: Post-CaCO3 | | | | |
|---------------------------------|-----------|----------------------|----------|-----------------------|
| | Duplicate | | Original | |
| Mean: | 1.4307 | phi (0.3709 mm) | 1.3793 | phi (0.3844 mm) |
| Standard Dev: | 0.5085 | phi-units (0.703 mm) | 0.5193 | phi-units (0.6977 mm) |
| Skewness: | 0.4626 | dimensionless | 0.4083 | dimensionless |
| Kurtosis: | 4.2860 | dimensionless | 4.5798 | dimensionless |
| 5th Moment: | 6.4016 | dimensionless | 7.1739 | dimensionless |
| 6th Moment: | 41.2530 | dimensionless | 51.3853 | dimensionless |
| RARD*: | 0.3554 | dimensionless | 0.3765 | dimensionless |
| Median: | 1.2747 | phi (0.4133 mm) | 1.2401 | phi (0.4233 mm) |

| Additional Data | |
|-------------------------|---------|
| Total Fines | |
| Original: | 0.05 % |
| Duplicate: | 0.08 % |
| Total Carbonates | |
| Original: | 27.06 % |
| Duplicate: | 25.73 % |

| Statistical Explanation | |
|---------------------------------------------------|---------------------------------------|
| Calculations based on the Method of Moments | |
| Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0 | |
| Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0 | |
| Millimeter data calculated by $mm = 2^{-(\phi)}$ | |
| * Reciprocal Absolute Relative Dispersion (RARD) | |
| Scale | |
| < 0.5 | Excellent homogeneity (e.g., beaches) |
| 0.5 to 1.0 | Good homogeneity |
| 1.0 to 1.33 | Fair homogeneity |
| > 1.33 | Poor homogeneity (e.g., glacial) |

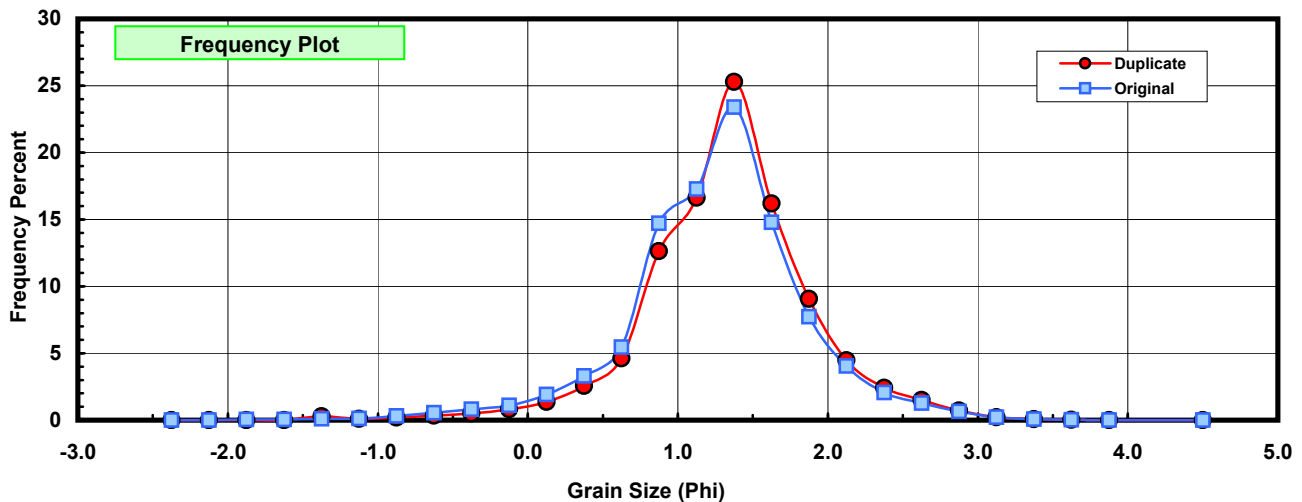
Pre-Digestion Grain Size Distribution

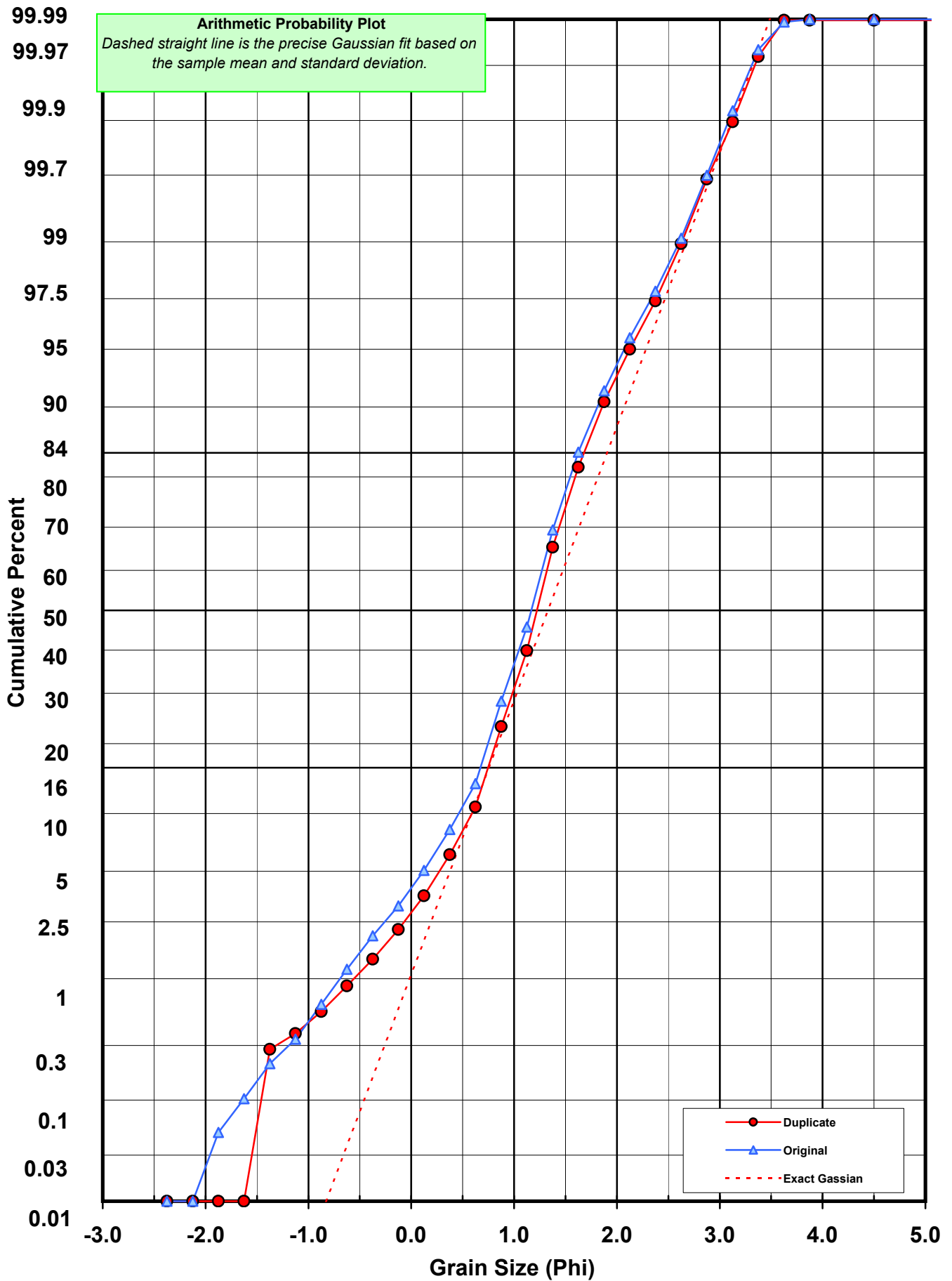
Onshore Grab Sample: BV-31-BB

Total Duplicate Sample Mass: 56.472 grams

Total Original Sample Mass: 58.549 grams

| Sieve Size (phi) | Sieve Midpt (phi) | Weight of Dupl (grams) | Freq Weight % | Cumulative Weight % | Weight of Original (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|------------------------|---------------|---------------------|----------------------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 | 0.030 | 0.051 | 0.051 |
| -1.50 | -1.625 | 0.000 | 0.000 | 0.000 | 0.030 | 0.051 | 0.102 |
| -1.25 | -1.375 | 0.156 | 0.276 | 0.276 | 0.062 | 0.106 | 0.208 |
| -1.00 | -1.125 | 0.056 | 0.099 | 0.375 | 0.075 | 0.128 | 0.336 |
| -0.75 | -0.875 | 0.109 | 0.193 | 0.568 | 0.182 | 0.311 | 0.647 |
| -0.50 | -0.625 | 0.185 | 0.328 | 0.896 | 0.316 | 0.540 | 1.187 |
| -0.25 | -0.375 | 0.285 | 0.505 | 1.401 | 0.482 | 0.823 | 2.010 |
| 0.00 | -0.125 | 0.460 | 0.815 | 2.215 | 0.643 | 1.098 | 3.109 |
| 0.25 | 0.125 | 0.773 | 1.369 | 3.584 | 1.126 | 1.923 | 5.032 |
| 0.50 | 0.375 | 1.445 | 2.559 | 6.143 | 1.934 | 3.303 | 8.335 |
| 0.75 | 0.625 | 2.603 | 4.609 | 10.752 | 3.196 | 5.459 | 13.795 |
| 1.00 | 0.875 | 7.133 | 12.631 | 23.383 | 8.615 | 14.715 | 28.510 |
| 1.25 | 1.125 | 9.384 | 16.617 | 40.000 | 10.109 | 17.267 | 45.777 |
| 1.50 | 1.375 | 14.284 | 25.294 | 65.294 | 13.700 | 23.401 | 69.178 |
| 1.75 | 1.625 | 9.149 | 16.201 | 81.495 | 8.659 | 14.790 | 83.968 |
| 2.00 | 1.875 | 5.121 | 9.068 | 90.563 | 4.525 | 7.729 | 91.697 |
| 2.25 | 2.125 | 2.524 | 4.469 | 95.033 | 2.362 | 4.035 | 95.731 |
| 2.50 | 2.375 | 1.358 | 2.405 | 97.438 | 1.201 | 2.051 | 97.783 |
| 2.75 | 2.625 | 0.857 | 1.518 | 98.955 | 0.740 | 1.264 | 99.047 |
| 3.00 | 2.875 | 0.408 | 0.722 | 99.678 | 0.383 | 0.654 | 99.701 |
| 3.25 | 3.125 | 0.124 | 0.220 | 99.897 | 0.127 | 0.217 | 99.918 |
| 3.50 | 3.375 | 0.044 | 0.078 | 99.975 | 0.036 | 0.061 | 99.980 |
| 3.75 | 3.625 | 0.012 | 0.021 | 99.996 | 0.009 | 0.015 | 99.995 |
| 4.00 | 3.875 | 0.000 | 0.000 | 99.996 | 0.003 | 0.005 | 100.000 |
| 5.00 | 4.500 | 0.002 | 0.004 | 100.000 | 0.004 | 0.007 | 100.007 |



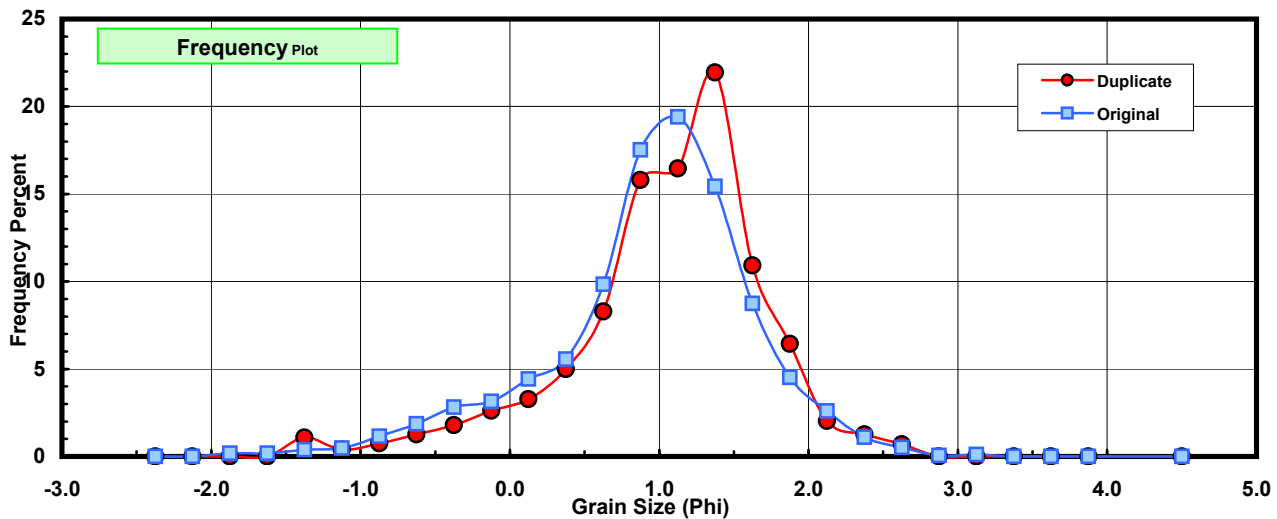


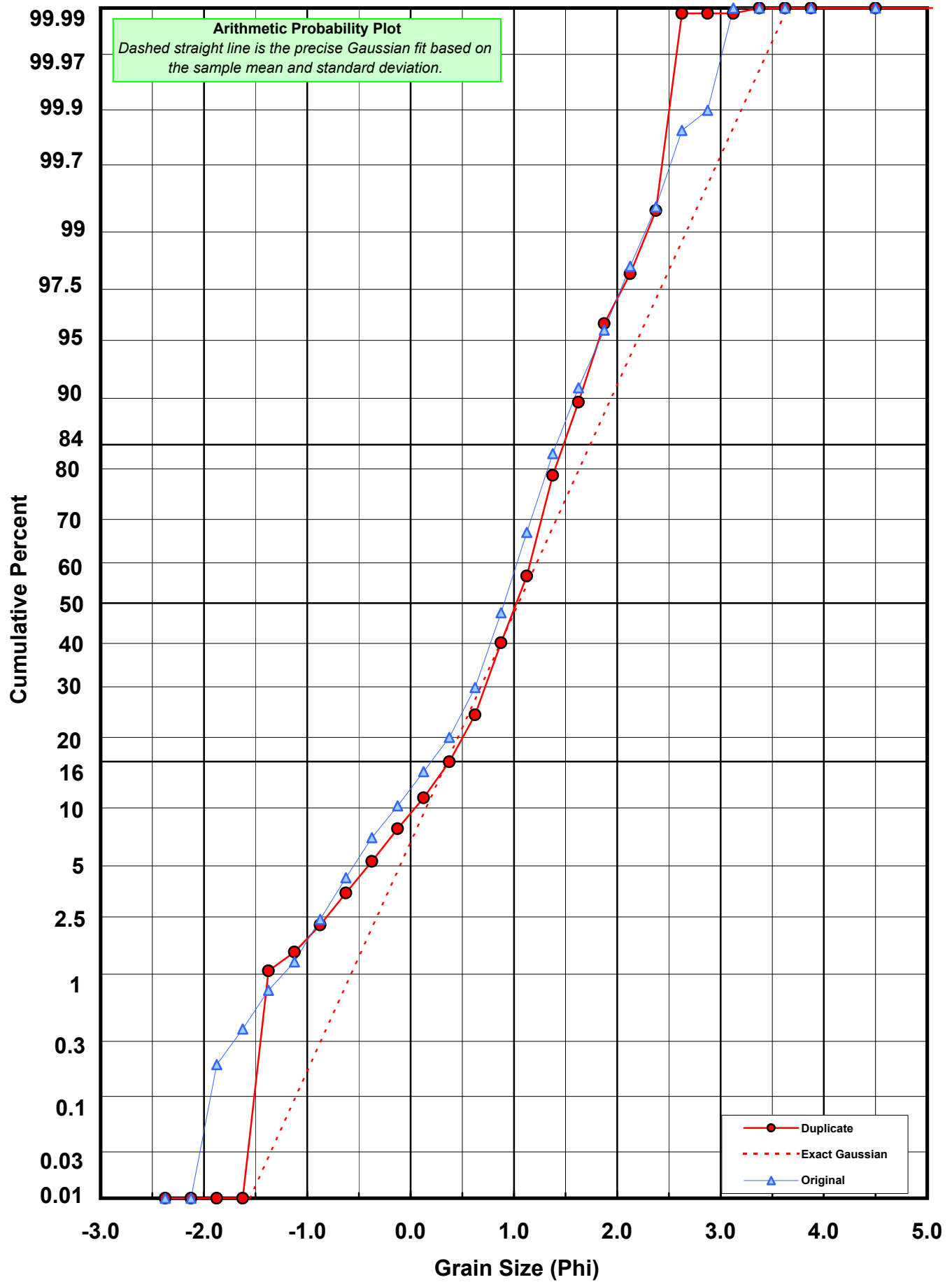
Carbonate Grain Size Distribution

Onshore Grab Sample: BV-31-BB

Total Duplicate Carbonate Mass: 14.567 grams
% Carbonate in Duplicate: 25.7 %
Total Original Carbonate Mass: 15.869 grams
% Carbonate in Original: 27.1 %

| Sieve Size (phi) | Sieve Midpt (phi) | Weight of Dupl (grams) | Freq Weight % | Cumulative Weight % | Weight of Original (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|------------------------|---------------|---------------------|----------------------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 | 0.030 | 0.189 | 0.189 |
| -1.50 | -1.625 | 0.000 | 0.000 | 0.000 | 0.030 | 0.189 | 0.378 |
| -1.25 | -1.375 | 0.156 | 1.071 | 1.071 | 0.062 | 0.391 | 0.769 |
| -1.00 | -1.125 | 0.056 | 0.384 | 1.455 | 0.075 | 0.473 | 1.241 |
| -0.75 | -0.875 | 0.109 | 0.748 | 2.204 | 0.182 | 1.147 | 2.388 |
| -0.50 | -0.625 | 0.185 | 1.270 | 3.474 | 0.297 | 1.872 | 4.260 |
| -0.25 | -0.375 | 0.261 | 1.792 | 5.265 | 0.446 | 2.811 | 7.070 |
| 0.00 | -0.125 | 0.380 | 2.609 | 7.874 | 0.500 | 3.151 | 10.221 |
| 0.25 | 0.125 | 0.477 | 3.275 | 11.148 | 0.703 | 4.430 | 14.651 |
| 0.50 | 0.375 | 0.728 | 4.998 | 16.146 | 0.881 | 5.552 | 20.203 |
| 0.75 | 0.625 | 1.207 | 8.286 | 24.432 | 1.561 | 9.837 | 30.040 |
| 1.00 | 0.875 | 2.302 | 15.803 | 40.235 | 2.780 | 17.518 | 47.558 |
| 1.25 | 1.125 | 2.398 | 16.462 | 56.697 | 3.079 | 19.403 | 66.961 |
| 1.50 | 1.375 | 3.198 | 21.954 | 78.650 | 2.448 | 15.426 | 82.387 |
| 1.75 | 1.625 | 1.591 | 10.922 | 89.572 | 1.386 | 8.734 | 91.121 |
| 2.00 | 1.875 | 0.937 | 6.432 | 96.005 | 0.718 | 4.525 | 95.646 |
| 2.25 | 2.125 | 0.296 | 2.032 | 98.037 | 0.412 | 2.596 | 98.242 |
| 2.50 | 2.375 | 0.184 | 1.263 | 99.300 | 0.175 | 1.103 | 99.345 |
| 2.75 | 2.625 | 0.101 | 0.693 | 99.993 | 0.080 | 0.504 | 99.849 |
| 3.00 | 2.875 | 0.000 | 0.000 | 99.993 | 0.008 | 0.050 | 99.899 |
| 3.25 | 3.125 | 0.000 | 0.000 | 99.993 | 0.016 | 0.101 | 100.000 |
| 3.50 | 3.375 | 0.001 | 0.007 | 100.000 | 0.000 | 0.000 | 100.000 |
| 3.75 | 3.625 | 0.000 | 0.000 | 100.000 | 0.000 | 0.000 | 100.000 |
| 4.00 | 3.875 | 0.000 | 0.000 | 100.000 | 0.000 | 0.000 | 100.000 |
| 5.00 | 4.500 | 0.000 | 0.000 | 100.000 | 0.000 | 0.000 | 100.000 |





Post-Digestion Grain Size Distribution

Onshore Grab Sample: BV-31-BB

Total Duplicate Digested Mass: 41.941 grams
% Silica in Duplicate: 74.3 %
Total Original Digested Mass: 42.708 grams
% Silica in Original: 72.9 %

| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % | Weight of Original (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|----------------------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.25 | -1.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.00 | -1.125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -0.75 | -0.875 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -0.50 | -0.625 | 0.000 | 0.000 | 0.000 | 0.019 | 0.044 | 0.044 |
| -0.25 | -0.375 | 0.024 | 0.057 | 0.057 | 0.036 | 0.084 | 0.129 |
| 0.00 | -0.125 | 0.080 | 0.191 | 0.248 | 0.143 | 0.335 | 0.464 |
| 0.25 | 0.125 | 0.296 | 0.706 | 0.954 | 0.423 | 0.990 | 1.454 |
| 0.50 | 0.375 | 0.717 | 1.710 | 2.663 | 1.053 | 2.466 | 3.920 |
| 0.75 | 0.625 | 1.396 | 3.328 | 5.992 | 1.635 | 3.828 | 7.748 |
| 1.00 | 0.875 | 4.831 | 11.519 | 17.510 | 5.835 | 13.663 | 21.411 |
| 1.25 | 1.125 | 6.986 | 16.657 | 34.167 | 7.030 | 16.461 | 37.871 |
| 1.50 | 1.375 | 11.086 | 26.432 | 60.599 | 11.252 | 26.346 | 64.217 |
| 1.75 | 1.625 | 7.558 | 18.021 | 78.620 | 7.273 | 17.030 | 81.247 |
| 2.00 | 1.875 | 4.184 | 9.976 | 88.596 | 3.807 | 8.914 | 90.161 |
| 2.25 | 2.125 | 2.228 | 5.312 | 93.908 | 1.950 | 4.566 | 94.727 |
| 2.50 | 2.375 | 1.174 | 2.799 | 96.707 | 1.026 | 2.402 | 97.129 |
| 2.75 | 2.625 | 0.756 | 1.803 | 98.510 | 0.660 | 1.545 | 98.675 |
| 3.00 | 2.875 | 0.423 | 1.009 | 99.518 | 0.375 | 0.878 | 99.553 |
| 3.25 | 3.125 | 0.129 | 0.308 | 99.826 | 0.111 | 0.260 | 99.813 |
| 3.50 | 3.375 | 0.043 | 0.103 | 99.928 | 0.039 | 0.091 | 99.904 |
| 3.75 | 3.625 | 0.015 | 0.036 | 99.964 | 0.014 | 0.033 | 99.937 |
| 4.00 | 3.875 | 0.004 | 0.010 | 99.974 | 0.008 | 0.019 | 99.956 |
| 5.00 | 4.500 | 0.011 | 0.026 | 100.000 | 0.019 | 0.044 | 100.000 |

